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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,269	01/29/2007	Knut Behnke	N81812LPK	6652

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EXAMINER	
DOTE, JANIS L	

ART UNIT	PAPER NUMBER
1795	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,269	BEHNKE ET AL.	
	Examiner	Art Unit	
	Janis L. Dote	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8, 9 and 12* is/are rejected.

7)☒ Claim(s) *6,7,10,11 and 13-15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. The examiner acknowledges the amendments to claims 3-6 and the addition of claims 8-15 filed on Nov. 25, 2009. Claims 1-15 are pending.

2. The examiner notes that the "Amendment to the specification" filed on Nov. 25, 2009, does not comply with 37 CFR 1.121 because the amended paragraph beginning at page 4, line 12, of the specification, adds text without the proper markings to show its insertion. The amended paragraph twice adds the symbol "C" without the proper markings.

Nonetheless, in the interest of compact prosecution, the "Amendment to the specification" filed on Nov. 25, 2009, has been entered.

3. The objection to the specification set forth in the office action mailed on Sep. 1, 2009, paragraph 3, has been withdrawn in response to the amended paragraph beginning at page 4, line 12, of the specification, filed on Nov. 25, 2009.

The rejections of claims 3-7 under 35 U.S.C. 112, second paragraph, set forth in the office action mailed on Sep. 1, 2009, paragraph 6, have been withdrawn in response to the amendments to claims 3-5 filed on Nov. 25, 2009.

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

In instant claims 4, 9, and 13, the recitation "in a temperature window of about 50°C or smaller" lacks antecedent basis in the specification. See the amended paragraph beginning at page 4, line 12, of the specification, filed on Nov. 25, 2009, which states that the transition of the toner from the solid to liquid state should preferably occur in a temperature range or a temperature window of about 30°C to 50°C." The temperature window of "about 50°C or smaller" recited in instant claims 4, 9, and 13 is broader than that disclosed in the amended paragraph because it encompasses transition temperatures that are within less than "about 30°C."

5. Applicants are advised that should claims 4 and 5 be found allowable, claims 9 and 12 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the

other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

6. Claims 13 and 14 are also objected to under 37 CFR 1.75 as being a substantial duplicate of claims 10 and 6, respectively. See MPEP § 706.03(k).

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-5, 8, 9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,799,236 (Paczkowski) combined with US 2002/0088799 A1 (Behnke).

Paczkowski discloses a method for fusing toner images applied to both sides of a substrate. The method comprises the steps of: (1) transferring a first marking particle image (also known in the toner art as a toner image) to one side of a receiving member; (2) prefusing the first marking particle image to said substrate; (3) transferring a second marking particle image to the other side of the receiving member; and (4) permanently fusing both the first marking particle image and second marking particle image to the receiving member. Col. 4, lines 20-34 and 59-67. According to Paczkowski, the prefusing

step provides heat "sufficient to at least partially melt the marking particles so that the particles become tackified so as to adhere to the receiver member on the first side thereof." Col. 4, lines 38-41. Thus, the marking particle prefusing temperature appears to be lower than the marking particle permanent fusing temperature. The prefusing temperature meets the limitations of the prefixing temperature recited in instant claims 1, 2, and 9.

Paczkowski does not disclose that the prefusing step and the permanent fusing step use microwaves as recited in instant claims 1 and 9. Nor does Paczkowski disclose that the marking particles have the toner thermal properties recited in instant claims 3-5, 8, 9 and 12.

However, Paczkowski does not limit the type of prefuser device or permanent fixing device. See reference claims 1 and 11. Paczkowski further teaches that the prefuser device may be a non-contact prefuser device. See reference claims 2 and 11.

According to Behnke, the use of microwaves for fixing toner images onto printed material is known. Paragraph 0003. Behnke discloses the problems of fixing toner images with conventional microwave devices and using traditional toners, such as incomplete toner melting, bubble formation in the toner images,

or insufficient adhesion of the toner onto the printed material, e.g., "the bond with the printed material is not created sufficiently by the viscosity of the melted toner, which is too high." Paragraph 0006. Behnke further teaches that problems can occur especially when a printed material is printed on both sides in two subsequently performed printing operations. Paragraph 0006. However, Behnke teaches that non-contact fixing is more preferred than contact fixing with heated rollers. According to Behnke, the advantages of non-contact fixing include the "avoidance of adhesive abrasion and the resultant increased service lifetime of the device used, and an improved reliability of the device." Paragraph 0007. Behnke teaches a microwave fusing device that adequately fuses a particular toner onto a printed material. The fusing device irradiates the printed material comprising the particular toner with microwaves from at least one microwave emitter, which heats the printed material to melt the toner. The particular toner has "a sharp transition from its solid to its liquid state during heating." Paragraph 0008. Behnke further teaches that the particular toner has a ratio of the modulus elasticity G' as recited in instant claims 3, 8, and 9 and the thermal properties recited in instant claims 4, 5, 9, and 12. Paragraph 0010. According to Behnke, the particular toner does "not become sticky or does not

melt at development temperatures," but is very fluid, with low viscosity at a higher temperature, for example approximately 90°C. The toner "without outside pressure and in a non-contact manner settles on and in the printed material and adheres and upon a cooling down becomes hard again very quickly and is fixed . . . the fixed toner has a good surface gloss that is matched to the printed material." Paragraph 0009.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Paczkowski and Behnke, to use the toner having the thermal properties taught by Behnke as the marking particles in the fusing method taught by Paczkowski. It would have also been obvious for that person to use the microwave fusing devices taught by Behnke as the non-contact prefuser device and as the permanent fusing device in the method taught by Paczkowski. That person would have had a reasonable expectation of successfully practicing a non-contact microwave fusing method that adequately fuses toner images applied to both sides of a substrate to provide fused toner images having good surface gloss as taught by Behnke and that has the advantages of non-contact fusing as taught by Behnke.

Applicants' arguments filed on Nov. 25, 2009, have been fully considered but they are not persuasive.

Applicants assert that "[a]s the Examiner thought, the subject matter of the various claims were commonly owned at the time of the applications so that 103(a) rejection is not applicable. Nexpress is owned by Eastman Kodak."

Applicants' assertion is not persuasive. Contrary to applicants' assertion, the 35 U.S.C. 103(a) rejection set forth above is applicable because both cited references are considered prior art under 35 U.S.C. 102(b), and are therefore not disqualified as prior art under 35 U.S.C. 103(c). Paczkowski and Behnke were published on Aug. 25, 1998, and on Jul. 11, 2002, respectively. The prior art publishing dates are prior to the instant application's effective filing date of Oct. 20, 2004, by more than one year.

The office action mailed on Sep. 1, 2009, paragraph 8, explained that "[i]n considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a)" (emphasis added)." 35 U.S.C. 103(c) states "[s]ubject matter developed by another person, which qualifies as prior art only under one or more of subsections (e),(f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person" (emphasis added).

Accordingly, the rejection of claims 1-5, 8, 9, and 12 stands.

9. Claims 6, 7, 10, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 15 is objected to as being dependent upon an objected based claim under 37 CFR 1.75, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Neither Paczkowski nor Behnke teaches or suggests the prefusing temperature or the final fixing temperature recited in instant claims 6, 10, and 15 and claims 7, 11, and 15, respectively.

10. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Sandra Sewell, whose telephone number is (571) 272-1047.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Janis L. Dote/
Primary Examiner, Art Unit 1795

JLD
Feb. 1, 2010